

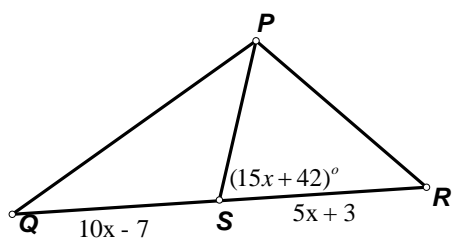
Geometry

Name _____

Unit 5 Worksheet 3 Medians & Altitudes

Period _____ Date _____

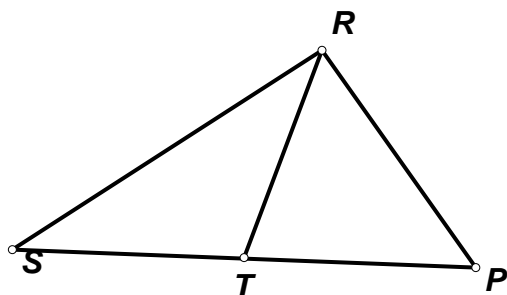
- 1.) A median connects a _____ to the _____ of the opposite side.
- 2.) The point where all of the medians meet in a triangle is called the _____.
- 3.) If \overline{PS} is a **median** of $\triangle PQR$, mark the triangle and find x and $m\angle PSR$.



$x =$ _____

$m\angle PSR =$ _____

- 4.) If \overline{RT} is a **median** and $ST = x + 7$, $TP = 3x - 11$, mark the triangle and find x , ST and TP .



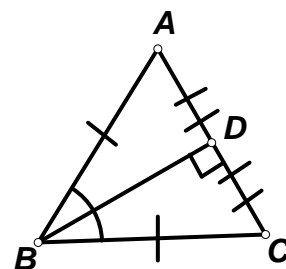
$x =$ _____

$ST =$ _____

$TP =$ _____

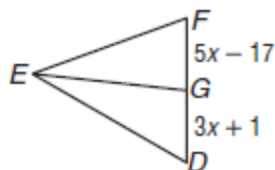
- 5.) What segment is a median in the triangle at the right? _____

What kind of triangle is $\triangle ABC$? _____



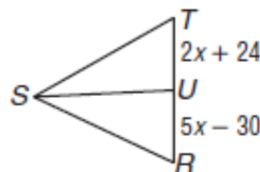
For number 6 & 7, solve for x given the following median.

- 6.) \overline{EG}



$x =$ _____

- 7.) \overline{SU}

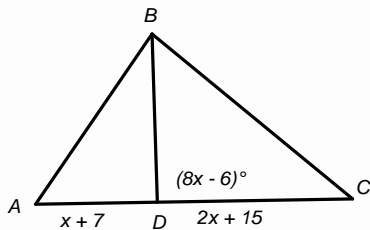


$x =$ _____

7.) An altitude is also called the _____ of the triangle and it is _____ to a side or the line containing the side. One of its endpoints must be a _____ of the triangle.

8.) The point where all of the altitudes meet is called the _____.

9.) If \overline{BD} is an **altitude** of $\triangle ABC$ find x , AD and DC .

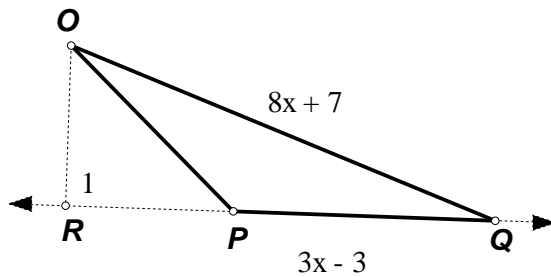


$$x = \underline{\hspace{2cm}}$$

$$AD = \underline{\hspace{2cm}}$$

$$DC = \underline{\hspace{2cm}}$$

10.) If \overline{OR} is an **altitude**, and $\angle 1 = 4x + 2$, **mark the triangle** and find x , OQ and PQ .

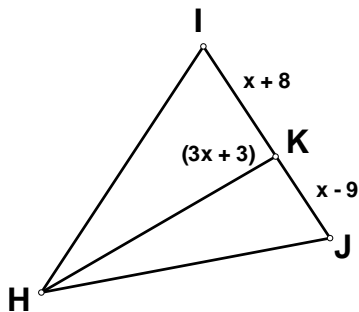


$$x = \underline{\hspace{2cm}}$$

$$OQ = \underline{\hspace{2cm}}$$

$$PQ = \underline{\hspace{2cm}}$$

11.) If \overline{HK} is an altitude of $\triangle HIJ$ and $m\angle IKH = 3x + 3$ then find x , IK , KJ .



$$x = \underline{\hspace{2cm}}$$

$$IK = \underline{\hspace{2cm}}$$

$$KJ = \underline{\hspace{2cm}}$$

12.) In isosceles $\triangle ABC$, \overline{BD} is 3 things:

1) _____ 2) _____

3) _____

